
Draft

Regulations for Determination of Network Tariff for City or Local Natural Gas Distribution Networks

Petroleum & Natural Gas Regulatory
Board, New Delhi

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NOTIFICATION

New Delhi, the.....

PETROLEUM AND NATURAL GAS REGULATORY BOARD

In exercise of the powers conferred by clause (t) of sub-section (2) to section 61 of the Petroleum and Natural Gas Regulatory Act, 2006 (19 of 2006), the Petroleum and Natural Gas Regulatory Board hereby makes the following regulations, namely:-

1. Short Title and commencement-

1.1 These Regulations may be called The Petroleum and Natural Gas Regulatory Board (Determination of Network Tariff for City or Local Natural Gas Distribution Networks) Regulations, 2007.

1.2 These Regulations shall come into force on the date of their publication in the Official Gazette.

2. Definition

2.1 In these Regulations, unless the context otherwise requires-

2.1.1 "Act", means the Petroleum and Natural Gas Regulatory Board Act, 2006;

2.1.2 "Appointed Day" means the date of October 1, 2007, when the Central Government notified the establishment of the Petroleum and Natural Gas Regulatory Board, 2007.

2.1.3 "Board" means the Petroleum and Natural Gas Regulatory Board established under sub-section (1) of Section 3 of the Act;

- 2.1.4 “City Gate Station” – means the point where custody transfer of natural gas from high / medium pressure transmission pipeline to the City or Local Natural Gas Distribution Network (hereinafter referred as CGD Network) takes place.
- 2.1.5 “Development of a CGD network” - means laying, building, operating or expanding a CGD Network.
- 2.1.6 “Network tariff” – means the weighted average unit rate of tariff (in Rs. per thousand standard cubic meter or Rs./ MSCM) for all the categories of consumers of natural gas (including natural gas supplies to a CNG station before compression) connected to/ served by the CGD network.
- 2.2 All other words and expressions used herein but not defined shall have the same meanings respectively assigned to them in the Act.
- 2.3 Unless defined herein or in the Act, the provisions of the General Clauses Act, 1897 as amended from time to time shall apply to these Regulations.

3. **Scope**

These regulations shall apply to an entity-

- 3.1 selected on the basis of single bid for laying, building, operating or expanding a CGD network, under the Regulations for Authorizing Development of City or Local Natural Gas Distribution Networks
- 3.2 authorized by the Central Government for development of the CGD network before the appointed day.
- 3.3 The entity laying, building, operating or expanding a CGD network before the appointed day and authorized by the Board for such activities under the

Regulations for Authorizing Development of City or Local Natural Gas Distribution Networks.

4. **Determination of network tariff**

The network tariff shall be determined as per the criteria at **Annexure-A**.

5. **Formats for Data submission for determination of network tariff**

The entity is obligated to submit to the Board the financial, cost and other data in the formats enclosed as **Attachment-1**:

5.1 For the category under clause 3.1 above, this information will form part of the formats seeking information from the entities participating in the bid under the Regulations Authorizing Development of City or Local Natural Gas Distribution Networks.

5.2 For the category under clause 3.2 above, this information is to be submitted within 30 days of the notification of these Regulations.

5.3 For the category under clause 3.3 above, this information is to be submitted along with the application seeking grant of authorization under the Regulations Authorizing Development of City or Local Natural Gas Distribution Networks.

6. **Miscellaneous**

If any dispute arises with regards to the interpretation of any of the provisions of these regulations, the decision of the Board shall be final. Further, the Board may at any time effect appropriate modifications in these regulations.

Annexure-A

Procedure for Determination of Network Tariff (as per Clause 4 of the Regulations for Determination of Network Tariff for City or Local Natural Gas Distribution Networks)

- 1 The transportation tariff of City or Local Natural Gas Distribution Network shall be determined in accordance with the following principles:
 - a) A reasonable rate of return on investments;
 - b) Investments resulting in creation of an efficient & safe infrastructure; and
 - c) Normative level of operating expenses required for efficient operation (including quality of service) of city or local natural gas distribution network.

2 Financial Feasibility

The entity to which these Regulations apply is obligated to submit all financial details of the CGD Network/ CGD Network project that may be required by the Board in determination of the Network Tariff.

3 Methodology for determination of tariff

The tariff to be charged for a period shall be the calculated based on “Discounted Cash Flow” (DCF) methodology ¹ considering reasonable rate of return determined as per clause 4 below. The parameters relevant to the applicability of the DCF methodology have been described in detail in clauses 4 to 6 below.

¹ Discounted Cash Flow refers to equating the inflows from the projected revenue earnings with the outflows of capital and operating expenditures over the economic life of the project by discounting these flows at the project's reasonable rate of return determined as per clause 4. The volumes and outflows are estimated over the economic life, which results in the determination of the tariffs required to be earned by the project to achieving the reasonable rate of return.

4 Reasonable Rate of Return

4.1 The rate of return on capital employed shall not be higher than the average rate of long-term Government Securities issued by the RBI during the period of 12 months prior to submission of application + X%. The X% shall provide incentive to entities for making investment in the development of CGD Networks in the country. The X% shall normally be fixed for a period of at least one year taking inter alia into account the weighted average cost of capital (WACC) for such projects. However, considering the economic scenario in the country and the area / region to be served, the Board may review this X%, even before the completion of one year period.

4.2 The rate determined as per clause 4.1 shall be grossed up for the nominal applicable rate of income tax and the rate so derived shall be referred to as **reasonable rate of return**. This grossing-up shall be restricted to the first 10 years of the operations of the city or local natural gas distribution networks² and for the remaining period up to the economic life of the project, grossing-up at the actual income tax rate of the entity³ shall be allowed. The grossing-up for the first 10 years of city or local natural gas distribution networks shall be allowed irrespective of any exemption or waiver of income tax allowed to the entity during this period, under the provisions of the Income Tax Act, 1961.

5 Return on Total Capital Employed

5.1 The reasonable rate of return shall be used to determine the return on total capital employed in the project over its economic life and the authorized entity is free to leverage the project financing in any suitable manner.

² Grossing-up of the rate of return with the applicable nominal rate of tax is allowed as it is expected that the entity, during the initial 7-10 years of the project commissioning, would require a financial support and also flexibility in terms of project financing & tax planning/ management.

³ Actual income tax rate shall be arrived at by dividing the income tax (not including any penalty, interest and income tax set-off for any previous year) by the sales revenue of the assessment year as per the final Income Tax assessment order.

5.2 The total capital employed shall be equal to the Gross Fixed Assets in the project less Depreciation (as per the rates allowed under Schedule VI to the Companies Act, 1956) plus Normative Working Capital (Equal to 30 days of operating cost excluding depreciation).

5.3 The Gross Fixed Assets shall be equal to the actual or that normatively assessed by the Board, whichever is lower, as required in the project over its economic life as per the following principles⁴ that may be considered as required to create an efficient and robust infrastructure:

- a. Capital costs in similar projects elsewhere in India benchmarked on a “like-to-like” basis.
- b. Appropriateness of the pipeline design and the operating philosophy with regards to maximum allowable operating pressure.
- c. Optimization of the equipments and facilities (CNG compressors, metering systems, SCADA, fire fighting, etc.) required based on an assessment of the appropriate available technology.
- d. Pipelines and Piping beyond the District Regulatory System (DRS) and other equipments (including meters) required to reach the appliance in case of an individual domestic PNG connection based on the principle of “Last Mile Connectivity”⁵.

⁴ The parameters identified here are not exhaustive and may vary depending upon the specific project under consideration. The Board shall decide these parameters in a transparent manner.

⁵ The entity is not required to separately charge the consumer for providing PNG domestic connectivity till the location of the first PNG burner appliance in the consumer’s premises. For subsequent connections to the same consumer in the same premises, a separate reasonable charge may be levied by the entity.

- e. Design parameters & fuel consumption norms of the equipments, like, compressors.
- f. Assessment of the latest costs (excluding the financing cost) of major equipments in the pipeline system – Steel/ PE pipelines, compressors, laying/ building costs, project management consultancy, pre-operative expenditure, etc.

6 Operating costs

Operating costs ⁶ required in the operation and maintenance of the natural gas pipeline over its economic life shall be allowed, on an actual basis or that assessed by the Board, whichever is lower, over the following heads:

- a) Consumables
- b) Utilities (Power, Fuel and Water)
- c) Salaries & Wages
- d) Repairs & Maintenance
- e) Insurance premia on assets (excluding the value of loss of profit) and on pipe line-fill quantity (in case the shipping of natural gas is also undertaken by the entity laying, building, operating or expanding the CGD network as a bundled operation)
- f) Administrative Overheads
- g) Depreciation (based on rates as per Schedule VI to the Companies Act, 1956)
- h) Miscellaneous income, if any, shall be netted from the operating cost

7 Volumes to be considered in determination of unit network tariff

⁶ Operating costs are those which are necessary for a proper upkeep and maintenance of a tangible asset created for operation of the pipeline system and does not include any financial cost, like, interest on loans, bad-debts, sales promotion/ advertisement expenses (except for tenders), expenditure incurred in raising or servicing of capital/ debenture/ bond/ debt, exchange variation on revenue account, but includes normal bank charges, bank guarantee charges, LC charges and bank charges for bid & performance bonds required as per the terms of authorization.

The volume to be used as divisor for the purpose of determination of unit network tariff shall be as follows:

- a) For any tariff review, divisor shall be equal to the volume assumed by the entity in the bid or volume as per Board's assessment ⁷, whichever is higher.
- b) Entity failing to meet bid volume targets (for PNG domestic customers) committed for exclusivity period – shortfall to be added to volume divisor till such targets are met.

8 Economic Life

The economic life of the project for the purpose of determination of network shall be as per the basis prescribed in the **Regulations for Exclusivity for City or Local Natural Gas Distribution Network**.

9 Tariff Review

- a) A Tariff review shall be carried out for each "Review Period".
- b) Review period shall normally be a period of three years (commencing from 1st of April and ending on 31st March of next year) from the end of the third year of the economic life of the project.
- c) The actual performance with respect to the capital & operating costs during the previous review period shall be monitored against the parameters identified under clauses 4 to 6 and the variations shall be adjusted in the tariff calculations.

⁷ The Board shall take into consideration the potential demand from different categories of consumers as assessed by the entity in its DFR of the project, volumes in the bid submitted, number of PNG domestic connections bid and its own assessment of the key drivers affecting the demand for natural gas in the city or local area.

- d) The adjustment for volume to be used as divisor in determination of the unit network tariff in the review period shall be as per the provisions of clause 7 above.
- e) The effect of the changes required for a review period referred to in clause 9 c) & 10 d) above shall be made in the tariff calculations on a prospective basis.
- f) However, the Board either may, on its own or on the entity's request, carry out a review in between two tariff review periods, considering:
 - (i) Change in the geographical spread or mandatory conversion not envisaged earlier necessitating incremental investments.
 - (ii) Applicable Nominal Income Tax Rate during the initial 10 years of the commissioning of the project.
 - (iii) Sudden change in any parameter used in working out the tariff.

10 Role of Consultants

- a) The Board may, appoint consultant (s) for independent verification/ assessment of-
 - (i) Estimates of capital/ operating cost and volume build-up estimates submitted by the entity.
 - (ii) Any or all technical parameters of the proposed city or local natural gas distribution network.
 - (iii) Any other issue as may be required considering the assumptions used by the entity in submission of the financial bid.

- b) The entity, on the directions of the Board, shall render all assistance to the consultant(s) in such independent verification/ assessment exercise and provide requisite data and explanations as may be required.
- c) The board may, seek assistance from consultant (s) in the development of suitable internal benchmarks in appraisal of the bids.
- d) The role of the consultant (s) shall be recommendatory and not binding on the Board.

11 Miscellaneous

If any dispute arises with regards to the interpretation of any of the provisions of these regulations, the decision of the Board shall be final. Further, the Board may at any time effect appropriate modifications in these regulations.